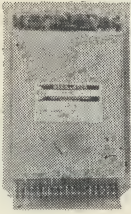


New products for 1965



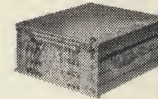
M0965

STABLE OSCILLATOR

Frequency — .1 cps to 25 Kc
Accuracy — .001% standard
up to — .0002% special
Stability — 0°C to 50°C
.005% Std. to .0005% special
Featuring — adjustable frequency
and/or Electrically Variable
Size — 5 x 7 x 1.12

COMPUTER MEMORY FOR AIRBORNE USE

For airborne use
24,000 bits Max. stor.
3 separate channels
2 Mc clock rate
Size — 7 x 5.87 x 3
To MIL specs



MA917

DELAY LINES

TO
MILITARY
AND
COMMERCIAL
SPECIFICATIONS

WIRE SONIC — MAGNETOSTRICTIVE DELAY LINES

FIXED DELAYS

	Model	Maximum Delay Microsec.	Max. Bit Rate RZ or C.W. Cent. Freq. Mc.	Size
LONGITUDINAL MODE — Short delays with ± 4 μ sec trim adjustment; standard temperature coefficient 150 PPM/°C, provided as low as 2 PPM/°C.	ML545A	23	2.0	1 x 5 x .375
	ML755A	20	2.5	1 x 6 x .375
	ML756A	50	2.0	2 x 8 x .375
	ML757	100	1.5	2 x 14 x .375
TORSIONAL MODE — Ultra stable with temperature coefficient less than .5 PPM/°C available. Signal to spurious noise 10:1 dynamic 30:1 static. All units provide a ± 4 μ sec adjustment. Unsealed or hermetically sealed to meet MIL specs.	MT762A-1	250	2.5	4 x 5 x .50
	MT762A-2	500	2.0	4 x 5 x .50
	MT762A-3	2000	1.5	4 x 5 x .50
	MT763A-1	3000	1.5	6 x 7 x .50
	MT763A-2	5000	1.2	6 x 7 x .50
	MT765A-1	10000	1.0	10.5 x 11.5 x .56
	MT765A-2	15000	0.75	10.5 x 11.5 x .56

SERIAL COMPUTER MEMORIES

	Model	Maximum Storage Bits RZ	Maximum Bit Rate RZ — MC	Size
COMPLETE UNITY GAIN MEMORY SYSTEMS supplied with transistorized circuitry for operation in any required mode RZ, NRZ or Bi-Polar. These units use the MT760 Delay Line series and have the exceptional stability and high signal to noise ratio of these Delay Lines. Can be cascaded and complete memory stacks are also provided. Maximum storage can be doubled by operating in the NRZ mode.	MS772B-1	625	2.5	4.5 x 6.20 x 1.12
	MS772B-2	1000	2.0	4.5 x 6.20 x 1.12
	MS772B-3	3000	1.5	4.5 x 6.20 x 1.12
	MS773A-1	4500	1.5	8 x 10.5 x .62
	MS773A-2	6000	1.2	8 x 10.5 x .62
	MS775A-1	10000	1.0	12.0 x 15.0 x .7
	MS775A-2	11250	.75	12.0 x 15.0 x .7

VARIABLE DELAYS

	Model	Delay Range Microsec.	Max Bit Rate RZ MC	C.W. B.W. MC	Size
SINGLE SHAFT CONTROL provides infinite resolution over a wide range of delays. Ideal for Radar Range Calibration, Simulation or Correlation work. 6 decade switch system provides .1 μ sec resolution.	MV994	2-18	2.0	1.5-2.5	1 x 5 x .5
	MV781A	2-30	2.0	1.5-2.5	1 x 9 x .5
	MV782	30-100	1.0	.8-1.2	2 x 15 x .5
	MV784	10-5000	.3	.2- .4	10.0 Dia. x 8
	MV785	10-100,000	1.0	.8-1.2	19 x 17 x 10.5

CORRELATION DELAY LINES — ELECTRICALLY VARIABLE

	Model	Max. Delay Seconds	Frequency Response	Size
LONG DELAYS OF COMPLEX SIGNALS with very little distortion. Ideal for correlation work. Supplied as: Fixed Delays; Multi-tap Delays; Variable Delays by means of switches or as an Electrically Variable system wherein delay is a function of a control voltage.	MA574	.01	10 cps to 50 Kc	12 x 12 x 3
	MA880	.03	10 cps to 50 Kc	12 x 22 x 18
	MA1005	.10	10 cps to 25 Kc	15 x 22 x 18
	MA1006	1.0	10 cps to 10 Kc	24 x 27 x 49

MULTIPLE OUTPUT DELAYS

	Model	Total Delay Microsec.	No. of Taps	Tap Spacing or Location Microsec.	Size
CODE GENERATORS — Provide as many tap positions as desired at any spacing desired (.2 μ sec min.). Fast rise times. Also provided with in and out circuitry. Used as parallel to serial and serial to parallel converters.	ML790	16	16	1.0	1.75 x 8 x .50
	ML718	15	12	1.25	1.75 x 8 x .50
	ML791	20.3	14	1.45	1.75 x 8 x .50
	ML883	28	24	1.0	3 x 9.37 x .50
MULTIPLE OUTPUTS — Adjustable independently over range ± 6 μ sec for radar correlation work. Units are supplied as unity gain packages complete with drivers, amplifiers and shapers.	MS283	30.5	4	12, 15, 18, 30	4 x 12 x 1.5
	MS402	48.0	6	2, 5, 8, 12, 14, 48	5 x 10 x 2.75
	MS399	16.3	3	6, 12, 16	4 x 12 x 1.5

DISTRIBUTED CONSTANT DELAY LINES

DD680 SERIES NANOSECOND MODULES

	Delay Choice Nanosec.	Impedance Choice Ohms	Delay to Rise Time Ratio	Size
DISTRIBUTED CONSTANT — Epoxy encapsulated. Temperature coefficient less than 120 PPM/°C. Case size depends on delay to rise time ratio.	5, 10, 20, 30	93, 330	5:1	.5 x .31 x 2.25
	40, 50, 60, 70 80, 90, 100	500, 1000	10:1	1.0 x .31 x 2.25

DD679 SERIES MICROSECOND MODULES

	Delay Choice Microsec.	Impedance Choice Ohms	Delay to Rise Time Ratio	Size
DISTRIBUTED CONSTANT — Epoxy encapsulated. Temperature coefficient less than 120 PPM/°C — Can be cascaded to obtain longer delays — other delays and impedance available.	.1, .2, .3, .4, .5	330, 500	5:1	.5 x .375 x 4.5
	.6, .7, .8, .9, 1.0	1000	10:1	1.0 x .375 x 4.5
	2.0; 4.0; 5.0; 10.0	500, 1000	10:1	1.0 x .5 x 4.5

INFINITE RESOLUTION VARIABLE REEL DELAY LINE

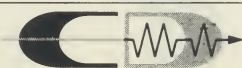
	Model	Delay Range Nanosec.	3 db B.W. Mc	Resolu- tion	Impe- dence Ohms	Attenu- ation Db	Size
DISTRIBUTED CONSTANT — With input and output impedance of equal value — can be spliced directly into interconnecting coaxial cables — IDEAL PHASE SHIFTER. Usable to 200 Mc — Single shaft control — BNC connectors.	DV581	2-50	70	Infinite	200	1	1.0 x 1.75 x 5.37
	DV576A	2-50	70	Infinite	93	1	1.0 x 1.75 x 5.37

DELAYS UP TO 100 NANOSEC. AND OTHER IMPEDANCES ALSO AVAILABLE.

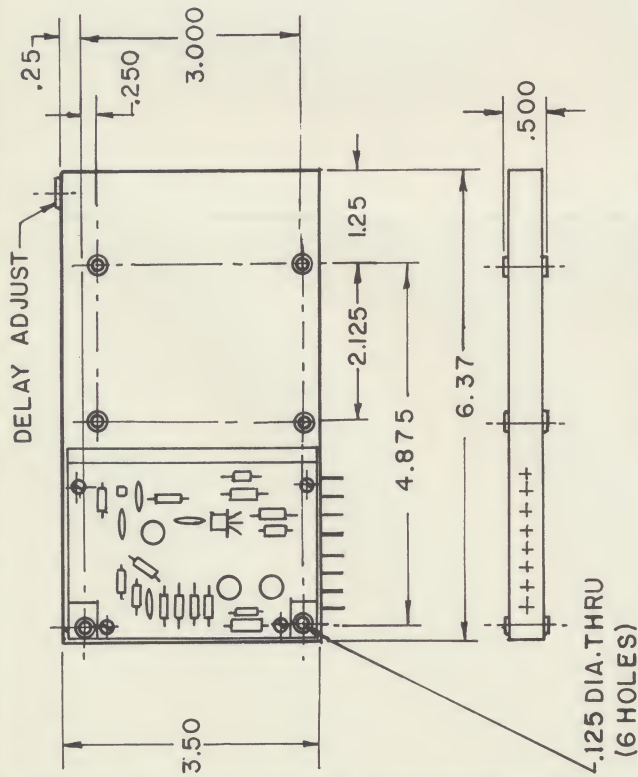
HIGHEST QUALITY • FASTEST DELIVERY

This condensed catalogue information is only meant to serve as a guide. Before finalizing on a design it is most prudent to utilize the experience, ingenuity and up-to-date information of our Engineering Staff. Expert guidance, which can save you hours of searching, is as close to you as your telephone —

Telephone:
516 AR 1-0666
TWX:
516-421-4235



COMPUTER DEVICES CORP.



MODEL MS 2064

DELAY:

Any specified delay from 20 to 1000 microseconds.

STORAGE:

Maximum of 2000 bits storage is achieved by operating unit at 2 Mc, NRZ, with a delay of 1000 microseconds. Maximum RZ storage is 1000 bits at a bit rate of 1 Mc, with delay of 1000 microseconds.

BIT RATE:

Any specified bit rate to maximum (shown above).

POWER

REQUIREMENTS:

+12V 20 ma maximum
-12V 5 ma maximum
+3.2V 5 ma maximum

CLOCK:

50% duty cycle: typical output from micrologic 909 (Fairchild)

INPUT:

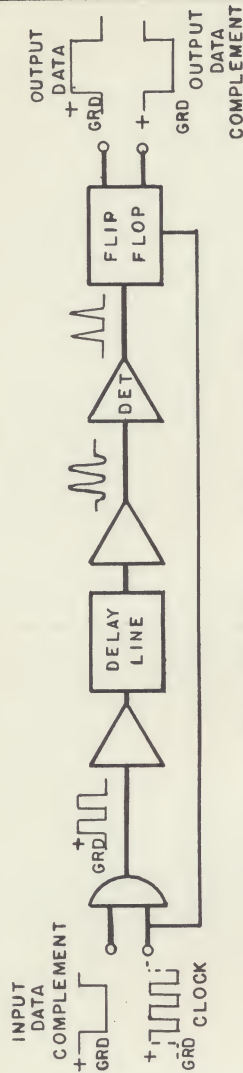
Typical: complement output (positive voltage to ground signal) of micrologic flip-flop 913 (Fairchild). 2 - 3 volts

OUTPUT:

"1"s and complement from micrologic flip-flop 913 (Fairchild). 2 volts

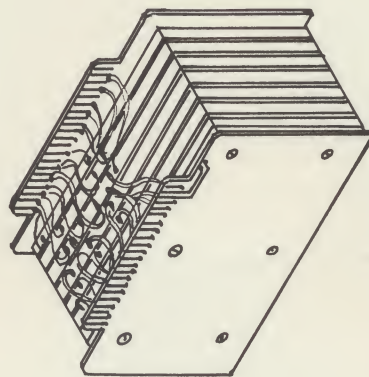
OPER. TEMP.:

$\pm 10^{\circ}\text{C}$ to $+60^{\circ}\text{C}$



TYPICAL BLOCK DIAGRAM

NOTE: Standard units are designed to meet commercial specifications. Units can be supplied to meet Military Specifications on special order.



MODEL
MA 2064

The MS 2064 is constructed for convenient stacking into memory packs, as shown in Model MA 2064 above. Printed plug-in boards with connectors can be provided as shown or to match your receptacle requirements.

DELAY LINE COMPUTER MEMORY DELCOM MODEL MS 2064		COMPUTER DEVICES CORP.	
SCALE NONE	DWN <i>Scary</i>	A	206401
APPVD <i>EW</i>	CHKD <i>W</i>		
		SIZE	DWG NO.
		REV.	